



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/702,521	10/31/2000	Alexander Sherman		7227
50086	7590	06/29/2005	EXAMINER	
LAW OFFICE OF DAVID H. JUDSON 15950 DALLAS PARKWAY SUITE 225 DALLAS, TX 75248			POLLACK, MELVIN H	
			ART UNIT	PAPER NUMBER
			2145	

DATE MAILED: 06/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	09/702,521	Applicant(s)	SHERMAN ET AL.
Examiner	Melvin H. Pollack	Art Unit	2145

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 20 April 2005.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-8 and 11 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-8 and 11 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 31 October 2000 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/24/04.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: see attached office action.

DETAILED ACTION

Change in Examiner

1. This case has been transferred to a new examiner. The new contact information will be provided in the conclusion section of this action.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 April 2005 has been entered.

Response to Arguments

3. Applicant's arguments with respect to claims 1-8 and 11 have been considered but are moot in view of the new ground(s) of rejection.
4. In the response to the last office action, the applicant changed the scope of the claims by adding claim 12 limitations, somewhat modified, to both independent claims. The ability for content servers to share content with each other has also been added to both independent claims. The examiner acknowledges that no new matter has been added by this amendment.
5. The new examiner withdraws the original 102 and 103 rejections based upon the amendment and upon the remarks provided.

Drawings

6. The drawings are objected to because of informalities such as line and lettering quality. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office

action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

7. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

8. The abstract of the disclosure is objected to because it is too long. Correction is required.

See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 1-8 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

11. Claim 1 recites the limitation "*inhibiting the first content server from receiving... a given content file in the aggregate purge request*" in the last paragraph of the claim. There is insufficient antecedent basis for this limitation in the claim. A given content file may apply to the file to be removed, or to other files. Hence, it is unclear whether the first server enters negotiation with one server, whether the second server's functionality is inhibited, whether the second server may send other files, etc. It is also unclear as to what mechanism is used to inhibit this sharing, and specifically as to whether the mechanism operates on the first server, the second server, or both. The claim language must be amended to better clarify these issues.

12. Claim 11 shares these problems.

13. Claims 2-8 inherit these problems.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 1, 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek (6,442,551) in view of Schmuck et al. (5,987,477).

16. For claim 1, Ofek teaches a method (abstract) for identifying and removing given content files (col. 1, line 1 – col. 6, line 40) from a set of content servers (Fig. 1) in a content delivery network (col. 7, line 40 – col. 9, line 5), wherein content servers share content files with each other, (col. 8, lines 30-60) comprising:

- a. Identifying content files to be modified within the content servers (col. 10, lines 30-45; col. 11, lines 10-20);
- b. Pushing an aggregate write request (col. 11, lines 10-20) to each of a set of staging servers (Fig. 1, CD), each aggregate purge request including an identifier for each content file to be removed from the content servers (Fig. 3, #65);
- c. Periodically, having each of the set of content servers obtain the aggregate write request from a given staging server (Fig. 3, #62 and 65), wherein the content servers obtain the aggregate write request from a given staging server (col. 10, line 30 – col. 11, line 30), wherein the content servers obtain the aggregate write request independently and at different times (Server 11 receives the signal at a different time from server 10, in both normal and independent mode); and
- d. At each content server, writing to the content server each content file identified in the aggregate write request (col. 10, line 30 – col. 11, line 30);
- e. Wherein after a first content server in the set of content servers has executed the aggregate write request (col. 12, lines 45-60), inhibiting the first content server from receiving, from a second content server in the set of content servers with which the first content server shares content files, a given content file in the aggregate purge request if

the second content server has not then executed the aggregate purge request (col. 22, line 50 – col. 25, line 55).

17. Ofek does not expressly disclose the aggregate purge command. Instead, an aggregate generic write (and modify) command is used, as shown above. However, one of ordinary skill in the art would have noted that a delete file falls under the definition of a write file command. Further, the use of a Restore command for recovering files deleted due to failure (col. 22, lines 50-55) indicates that a file may be removed purposefully. Schmuck teaches a method (abstract) of performing content sharing among servers (col. 1, line 1 – col. 5, line 15) wherein files may be deleted from the content servers (col. 15, lines 55-65). At the time the invention was made, one of ordinary skill in the art would have used a Schmuck system in Ofek in order to perform proper synchronizations (Schmuck, col. 16, lines 50-55) in cases of Ofek's independence operations (col. 12, lines 10-30).

18. Ofek teaches a restore command in which the second server sends a copy of the deleted file to the first server if and only if the first server states that an error has occurred. By keeping the first server from sending the command, the second server is inhibited from sending the file that the first file deleted, the second server later deleting that file as well. Therefore, the limitations are fulfilled.

19. Claim 11 is drawn to the limitations in claims 1 and 6. Claim 11 adds the limitations that the content served comprise cache files, that a Web-based interface is used for identifying content files to be purged, and that a purge server is used for batching a set of purge requests into an aggregate purge request. Ofek teaches the batching process (col. 4, line 50 – col. 5, line 10) and web interface (Fig. 1, #13 and #40). Schmuck teaches caching (col. 20, lines 40-65; col. 24,

line 45 – col. 26, line 30). Therefore, since claims 1 and 6 are rejected, claim 11 is also rejected for the reasons above.

20. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek and Schmuck as applied to claim 1 above, and further in view of Fox et al. (6,421,781).

21. For claim 2, Ofek and Schmuck do not expressly disclose that the aggregate purge request is pushed to the each of the set of staging servers over a secure link. Fox teaches a method (abstract) of securely handling push requests for an array of servers (col. 1, line 1 – col. 2, line 30) that utilize secure links in a push network (col. 4, lines 23-45; col. 8, line 10 – col. 10, line 25). At the time the invention was made, one of ordinary skill in the art would have used Fox security measures to block against integrity-damaging or access-damaging attacks (col. 8, lines 15-30).

22. Claims 3 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek and Schmuck as applied to claim 1 above, and further in view of Garrity et al. (6,230,205).

23. For claim 3, Ofek and Schmuck do not expressly disclose that the aggregate purge request is pulled from the given staging server to each of the set of content servers over a secure link. Garrity teaches a method (abstract) of performing data transfer with a host of content servers (col. 1, line 1 – col. 2, line 50) wherein the pull network is secured (col. 4, lines 30-60). At the time the invention was made, one of ordinary skill in the art would have added Garrity security measures to secure data operations (col. 4, lines 40-42).

24. For claim 6, Ofek and Schmuck do not expressly disclose the step of identifying the content files to be removed from the content servers includes the step of verifying that a user requesting removal is authorized to purge the content files. Garrity teaches that the CP server (Fig. 4, #402) allows a CP to manage delivery of content (col. 6, line 33), that a user may decide to delete data (col. 9, lines 11-13), and that consumers are verified by a user server (col. 7, lines 11-12). At the time the invention was made, one of ordinary skill in the art would have added Garrity security measures to secure data operations (col. 4, lines 40-42).

25. For claim 7, Ofek and Schmuck do not expressly disclose that the user is a content delivery network customer. Garrity teaches this limitation (col. 7, lines 12-13). At the time the invention was made, one of ordinary skill in the art would have added Garrity security measures to secure data operations (col. 4, lines 40-42).

26. For claim 8, Ofek and Schmuck do not expressly disclose that the user is a content delivery network administrator. Garrity teaches this limitation (Fig. 4, #420; col. 3, line 38). At the time the invention was made, one of ordinary skill in the art would have added Garrity security measures to secure data operations (col. 4, lines 40-42).

27. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ofek and Schmuck as applied to claim 1 above, and further in view of Dobbins et al. (US 2002/0066033).

28. For claim 4, Ofek and Schmuck do not expressly disclose issuing a notification that each content file identified in the aggregate purge request has been purged from the content delivery network. Dobbins teaches a method (abstract) of managing content from numerous content servers (background and summary) and specifically of session cancellations by way of a

messaging service corresponding to notification of cancellation (p. 3, para. [0026]). At the time the invention was made, one of ordinary skill in the art would have added Dobbins messaging service to Ofek and Schmuck's content delivery management techniques in order to improve content delivery and to manage transfer of data within a communications system (p. 1, para. [0010]).

29. For claim 5, Ofek and Schmuck do not expressly disclose issuing a notification that each content file identified in the aggregate purge request has been accepted for purging. Dobbins teaches a method (abstract) of managing content from numerous content servers (background and summary) and specifically of session cancellations by way of a messaging service corresponding to notification of cancellation (p. 3, para. [0026]). At the time the invention was made, one of ordinary skill in the art would have added Dobbins messaging service to Ofek and Schmuck's content delivery management techniques in order to improve content delivery and to manage transfer of data within a communications system (p. 1, para. [0010]).

Conclusion

30. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They relate to a variety of content server embodiments and handling.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H. Pollack whose telephone number is (571) 272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571) 272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHP
23 June 2005

V. Martin Wallace
VALENCIA MARTIN-WALLACE
SUPERVISORY PATENT EXAMINER